

Notice of Allowability

Application No.

10/715,822

Applicant(s)

MATSUMOTO ET AL.

Examiner

Antonio A. Caschera

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview conducted on 1/19/06.
2. ☒ The allowed claim(s) is/are 8 and 19-21.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date <u>01/19/06</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paul Bobowiec on 01/19/06. The contents of the interview can be found in the accompanied Interview Summary.

The application has been amended as follows:

IN THE CLAIMS:

1-7. (Cancelled)

8. (Currently Amended) ~~The~~ An image simulation method according to claim 5, for mapping a texture to a specified face of a three-dimensional image shown on a display, comprising:

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setting three axes that will be orthogonal to one another using a plurality of points of the three dimensional image in order to establish a three dimensional space on the three-dimensional image;

establishing a target face, to which a texture will be mapped, on the basis of a virtual surface which is set with the three axes of the three-dimensional space;

determining initial values of a drawing start point for drawing the texture and number of drawing iterations wherein, in a case the initial values of the number of drawing iterations are determined, the length of a side of the virtual surface defined by the three axes is set and the number of drawing iterations is then determined on the basis of the length of the side of the virtual surface and the size of the texture so that the target face is fully mapped with the texture;

drawing the target face with the texture mapped thereto on the display in accordance with the drawing start point and the number of drawing iterations; and

drawing a wireframe, which divides the target face mapped with the texture, on the display in accordance with the drawing start point and the number of drawing iterations.

9-18. (Cancelled)

19. (New) An image simulation method for mapping a texture to a specified face of a three-dimensional image shown on a display, comprising:

setting three axes that will be orthogonal to one another using a plurality of points of the three dimensional image in order to establish a three dimensional space on the three-dimensional image;

establishing a target face, to which a texture will be mapped, on the basis of a virtual surface which is set with the three axes of the three-dimensional space;

determining initial values of a drawing start point for drawing the texture and number of drawing iterations on the basis of the length of the side of the virtual surface and the size of the texture so that the target face is fully mapped with the texture;

drawing the target face with the texture mapped thereto on the display in accordance with the drawing start point and the number of drawing iterations; and

drawing a wireframe which divides the target face mapped with the texture on the display in accordance with the drawing start point and the number of drawing iterations, wherein in a case a movement of the wireframe is requested by dragging the wireframe on the display, the value of the drawing start point is changed in accordance with the amount of movement of the dragging the wireframe.

20. (New) The image simulation method according to claim 8, wherein in a case a change of the number of lines of the wireframe is requested by dragging the wireframe on the display, the value of the number of drawing iterations is changed in accordance with the number of the wireframes changed on the basis of the amount of movement of the dragging the wireframe.

21. (New) An image simulation method for mapping a texture to a specified face of a three-dimensional image shown on a display, comprising:

setting three axes that will be orthogonal to one another using a plurality of points of the three dimensional image in order to establish a three dimensional space on the three-dimensional image;

establishing a target face, to which a texture will be mapped, on the basis of a virtual surface which is set with the three axes of the three-dimensional space;

determining initial values of a drawing start point for drawing the texture and number of drawing iterations on the basis of the length of the side of the virtual surface and the size of the texture so that the target face is fully mapped with the texture;

drawing the target face with the texture mapped thereto on the display in accordance with the drawing start point and the number of drawing iterations;

drawing a wireframe, which divides the target face mapped with the texture, on the display in accordance with the drawing start point and the number of drawing iterations, wherein in a case of movement of the wireframe and a change of the number of wireframes is requested by dragging the wireframe on the display, a value of the drawing start point is changed in accordance with the amount of movement of the dragging the wireframe and the value of the number of drawing iterations is changed in accordance with the number of the wireframes changed on the basis of the amount of movement of the dragging the wireframe.

Allowable Subject Matter

3. Claims 8 and 19-21 are allowed.

The following is an examiner's statement of reasons for allowance:

In reference to claims 8, 19 and 21, the prior art of record (Mukoyama et al. (U.S. Patent 6,831,659 B1) and Palm (U.S. Patent 5,742,291)), does not explicitly disclose determining the number of drawing iterations by determining a length of the side of the face of the virtual object and using this length with a size of texture to map the texture onto the wireframe, in combination with the further limitations of claims 8, 19 and 21 respectively.

In reference to claim 20, claim 20 depends upon allowable claim 8 and therefore is also deemed allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

References Cited

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
 - a. Kilgariff et al. (U.S. Patent 6,850,243 B1)
 - Kilgariff et al. discloses a system, method and computer program product for texture sampling in a graphics pipeline.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781. The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella, can be reached at (571) 272-7778.

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Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

aac


1/20/06